

What is claimed is:

1. A positive resist composition comprising:

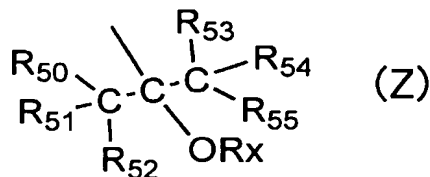
(A) a fluorine atom-containing resin,

wherein the resin comprises at least one group that increases a solubility of the resin in an alkali developer by the action of an acid; and

(B) a sulfonium salt compound having a cation moiety,

wherein the cation moiety contains at least one hydroxy group, and the sulfonium salt compound generates an acid upon irradiation with one of an actinic ray and a radiation.

2. The positive resist composition of claim 1, wherein the resin (A) is a resin which has repeating a unit having a group represented by the following general formula (Z):



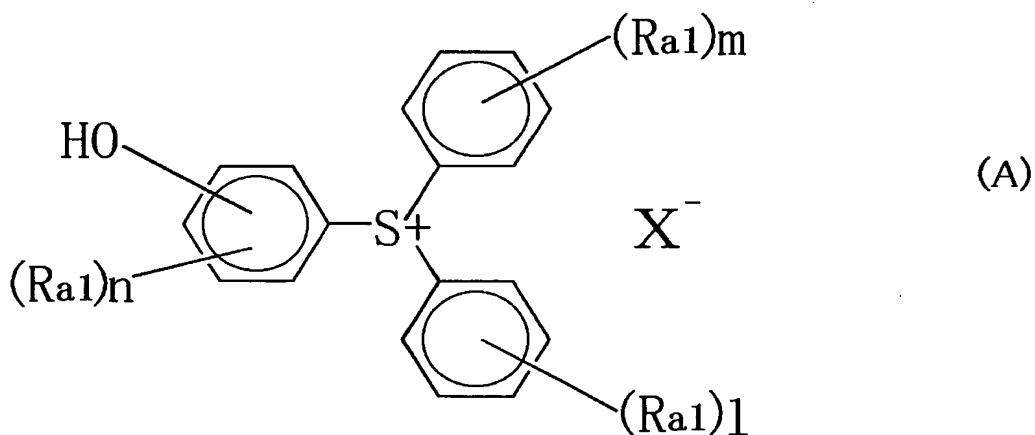
wherein R₅₀ to R₅₅ each independently represents a hydrogen atom, a fluorine atom, or an alkyl group, provided that at least one of R₅₀ to R₅₅ represents either a fluorine atom or an alkyl group in which at least one of the hydrogen atoms has been replaced by a fluorine atom; and Rx represents a hydrogen atom or an organic group.

3. The positive resist composition of claim 1, wherein

the resin (A) includes a repeating unit and the repeating unit includes a group where a carboxyl group is protected by an acid-decomposable group.

4. The positive resist composition of claim 1, wherein the resin (A) has a weight-average molecular weight of from 1,000 to 200,000, and the resin (A) has no more than 10% by weight of a total amount of a component having a molecular weight of 1,000 or lower.

5. The positive resist composition of claim 1, wherein the sulfonium salt compound as ingredient (B) is represented by the following general formula (A):



wherein Ra_1 represents a hydroxy group, a halogen atom, an alkyl group, an alkoxy group, an alkoxycarbonyl group, an aryl group, an aryloxy group, an acyl group, an acylamino group, or an alkylsulfonylamino group, provided that when two or more Ra_1 's are present in the molecule, these are the same or different;

1, m, and n each represents an integer of 0 to 4; and X⁻ represents a non-nucleophilic anion.

6. The positive resist composition of claim 1, further comprising:

(C) a fluorochemical surfactant or silicone surfactant;

and

(D) a basic compound.

7. The positive resist composition of claim 6, wherein the basic compound (D) is a compound having a structure selected from an imidazole structure, diazabicyclo structure, onium hydroxide structure, onium carboxylate structure, trialkylamine structure, and aniline structure.

8. The positive resist composition of claim 1, further comprising (F) a dissolution-inhibiting compound having a molecular weight of not more than 3,000 which is capable of decomposing by the action of an acid to increase solubility in an alkali developer.

9. The positive resist composition of claim 1, wherein said at least one group, that increases a solubility of the resin in an alkali developer by the action of an acid, is a group causing an alkali-soluble group by the action of an acid.

10. A method of forming a resist pattern comprising:
coating the positive resist composition as described
in claim 1 on a substrate;
irradiating a resultant coating with actinic rays or
a radiation; and
developing the resultant coating.